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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/544,253	04/05/2000	Gopal Parupudi	MSI-505US	7033

22801 7590 07/17/2002

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EXAMINER

LY, ANH

ART UNIT	PAPER NUMBER
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2172

DATE MAILED: 07/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/544,253

Applicant(s)

PARUPUDI ET AL.

Examiner

Anh Ly

Art Unit

2172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-19, 24-28, 30-31, 37-43, 48-49 and 58-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,953,722 issued to Lampert et al. (hereinafter Lampert).

With respect to claim 1, Lampert discloses one or more computer-readable media (col. 2, lines 1-26, col. 8, lines 6-29 and col. 9, lines 35-48); and a hierarchical tree structure resident on the media and comprising multiple nodes each of which represent geographical divisions of the Earth (abstract, col. 2, lines 42-67, col. 3, lines 1-10 and col. 26, lines 51-65).

Lampert does not disclose clearly, "multiple nodes each of which represent geographical division of the Earth." But, however, Lampert shows a searchable tree structure whose nodes represent division of the geographic region (abstract, col. 2, lines 61-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the teachings of Lampert such as computer readable medium storages, tree structure and nodes to geographic region so as to have a system for determining context of a database network.

With respect to claims 2-8, Lampert discloses wherein the one or more computer-readable media comprise one or more networks (col. 8, lines 6-29 and col. 9, lines 35-48); wherein the nodes comprise political or natural entities, wherein the political or natural entities comprises one or more of the following: continents, countries, oceans, states, counties and cities; wherein the nodes comprise infrastructure entities;

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one or more of the following: postal codes, area codes and time zones; public places and non-physical entities (abstract, col. 2, lines 42-67, col. 3, lines 1-10, col. 4, lines 25-65; col. 26, lines 51-67 and col. 27, lines 1-67, see figs 14-16).

With respect to claims 9-19, Lampert discloses wherein the nodes comprise a plurality of attributes, one of which comprising an entity identification (EID) that is unique to the node; wherein one of the attributes comprises a name attribute; a neutral ground truth name attribute; wherein one of the attributes comprises a geographic attribute; a latitude/longitude attribute; a relative importance index; a contextual parent attribute ; a source attribute; a start/end dates attribute; a modification date attribute and a status attribute (abstract, col. 2, lines 45-67, col. 3, lines 1-10, col. 4, lines 18-67, col. 5, lines 1-56, col. 6, lines 24-40, col. 7, lines 26-46, col. 8, lines 6-53, col. 20, lines 61-67, col. 21, lines 1-67 and col. 22, lines 1-3).

With respect to claim 24, Lampert discloses one or more computer-readable media; a first hierarchical tree structure having multiple nodes associated with a first context; at least one second hierarchical tree structure having multiple nodes associated with a second context; and at least one node from the at least one second hierarchical tree structure being linked with one node on the first hierarchical tree structure by a link that is configured to enable a complete context to be derived from the first and second to contexts (col. 2, lines 1-26, col. 8, lines 6-29 and col. 9, lines 35-48; abstract, col. 2, lines 42-67, col. 3, lines 1-10 and col. 26, lines 51-65).

Lampert does not disclose clearly, "hierarchical tree structure having multiple nodes." But, however, Lampert shows a searchable tree structure whose nodes

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represent division of the geographic region (abstract, col. 2, lines 61-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the teachings of Lampert such as computer readable medium storages, tree structure and nodes to geographic region so as to have a system for determining context of a database network.

With respect to claims 25-28, Lampert discloses wherein the first and second contexts comprise a location context wherein the nodes of the first hierarchical tree structure comprise geographical divisions of the Earth; wherein the nodes of the at least one second hierarchical tree structure comprise physical and/or logical entities; wherein the first and the at least one second hierarchical tree structures comprise a plurality of attributes, two of which comprising: an identification that is unique to a node; and information that pertains to the tree with which the node is associated (abstract, col. 2, lines 42-67, col. 3, lines 1-10, col. 4, lines 25-65; col. 26, lines 51-67 and col. 27, lines 1-67, see figs 14-16).

With respect to claim 30-31, Lampert discloses one or more goods or services associated with one or more of the nodes of the at least one second hierarchical tree structure and wherein the first hierarchical tree structure to comprises a standardized view of the Earth, and the at least one second hierarchical tree structure comprises an organization-specific view of at least a portion of the Earth, the organization-specific view comprising a physical/logical entity that links into specific portions of the Earth. (abstract, col. 2, lines 42-67, col. 3, lines 1-10, col. 4, lines 25-65; col. 26, lines 51-67 and col. 27, lines 1-67, see figs 14-16).

With respect to claim 37, Lampert discloses accessing first and one or more second hierarchical tree structures that are resident on one or more computer-readable media, each tree structure having multiple nodes, the nodes of the first hierarchical tree structure being associated with a first context, the nodes of the one or more second hierarchical tree structures being associated with a second context; and traversing multiple nodes of at least one of the tree structures to derive a context (col. 2, lines 1-26, col. 8, lines 6-29 and col. 9, lines 35-48; abstract, col. 2, lines 42-67, col. 3, lines 1-10 and col. 26, lines 51-65).

Lampert does not disclose clearly, "hierarchical tree structure having multiple nodes." But, however, Lampert shows a searchable tree structure whose nodes represent division of the geographic region (abstract, col. 2, lines 61-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the teachings of Lampert such as computer readable medium storages, tree structure and nodes to geographic region so as to obtain a method for determining context of a database network.

With respect to claim 38-43, Lampert discloses wherein the traversing derives a location context; wherein the nodes of the first hierarchical tree comprise geographical divisions of the Earth; wherein the nodes of the one or more second hierarchical tree comprise physical and/or logical entities; wherein the traversing comprises traversing at least one node on each tree to derive the context; wherein the context comprises a location and wherein the first and one or more second hierarchical tree structures comprise at least one node pair 14 that is linked (abstract, col. 2, lines 42-67, col. 3,

lines 1-10, col. 4, lines 25-65; col. 6, lines 1-12, col. 26, lines 51-67 and col. 27, lines 1-67, see figs 14-16; col. 22, lines 50-67 and col. 23, lines 1-67).

With respect to claim 48, Lampert discloses access first and second hierarchical tree structures, each tree structure having multiple nodes, the nodes of the first hierarchical tree structure being associated with a first location context, the nodes of the second hierarchical tree structure being associated with a second location context, at least one node of the second hierarchical tree structure being linked with a node of the first hierarchical tree structure; and traverse at least one node of each tree structure to derive a location context, at least one node in a traversal path that leads to a root node of the second hierarchical tree structure being linked with a node of the first hierarchical tree structure (col. 2, lines 1-26, col. 8, lines 6-29 and col. 9, lines 35-48; abstract, col. 2, lines 42-67, col. 3, lines 1-10 and col. 26, lines 51-65).

Lampert does not disclose clearly, "hierarchical tree structure having multiple nodes." But, however, Lampert shows a searchable tree structure whose nodes represent division of the geographic region (abstract, col. 2, lines 61-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the teachings of Lampert such as computer readable medium storages, tree structure and nodes to geographic region so as to have one or more computer-readable media having computer-readable instructions in order to obtain a method for determining context of a database network.



With respect to claim 49, Lampert discloses the computing device automatically determines its location context (col. 1, lines 20-41, col. 4, lines 66-67, col. 5, lines 1-14, col. 7, lines 48-67 and col. 8, lines 1-67).

With respect to claim 58, Lampert discloses receiving input from a source that specifies information pertaining to physical and/or logical entities; processing the information to define a hierarchical tree structure having a context, the tree structure comprising multiple nodes each of which represent a separate physical or logical entity; linking at least one of the multiple nodes to a node of another tree structure having a context and multiple nodes that represent physical and/or logical entities, the tree structures being configured for traversal in a manner that enables context to be derived from one or more of the nodes (col. 2, lines 1-26, col. 8, lines 6-29 and col. 9, lines 35-48; abstract, col. 2, lines 42-67, col. 3, lines 1-10 and col. 26, lines 51-65).

Lampert does not disclose clearly, "the tree structure comprising multiple nodes." But, however, Lampert shows a searchable tree structure whose nodes represent division of the geographic region (abstract, col. 2, lines 61-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the teachings of Lampert such as computer readable medium storages, tree structure and nodes to geographic region so as to have one or more computer-readable media having computer-readable instructions in order to obtain a method for determining context of a database network.

With respect to claim 59, Lampert discloses the context that is derived comprising a location context (col. 1, lines 20-41, col. 4, lines 66-67, col. 5, lines 1-14, col. 7, lines 48-67 and col. 8, lines 1-67).

With respect to claim 60, Lampert discloses receiving input from a source that specifies information pertaining to physical and/or logical entities; processing the information to define a hierarchical tree structure having a context, the tree structure comprising multiple nodes each of which represent a separate physical or logical entity; linking at least one of the multiple nodes to a node of another tree structure having a context and multiple nodes that represent physical and/or logical entities, the tree structures being configured for traversal in a manner that enables context to be derived from one or more of the nodes (col. 2, lines 1-26, col. 8, lines 6-29 and col. 9, lines 35-48; abstract, col. 2, lines 42-67, col. 3, lines 1-10 and col. 26, lines 51-65).

Lampert does not disclose clearly, "the tree structure comprising multiple nodes." But, however, Lampert shows a searchable tree structure whose nodes represent division of the geographic region (abstract, col. 2, lines 61-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the teachings of Lampert such as computer readable medium storages, tree structure and nodes to geographic region so as to have one or more computer-readable media having computer-readable instructions in order to have at least one computer readable media having computer readable instructions for determining context of a database network.

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5. Claims 20-23, 29, 32-36, 44-47 and 50-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,953,722 issued to Lampert et al. (hereinafter Lampert) in view of US Patent No. 6,151,601 issued to Papierniak et al. (hereinafter Papierniak).

With respect to claims 20-23, Lampert discloses a system for determining context as discussed in claim 1.

Lampert does not explicitly indicate, "wherein the tree structure does not include any nodal associations with businesses or services; wherein the computer-readable media is embodied on a mobile computing device; wherein the computer-readable media is embodied on a handheld mobile computing device and wherein the computer-readable media is accessible to a mobile computing device via the Internet."

However, Papierniak discloses business context, wireless/mobile and Internet (abstract, col. 1, lines 10-40, col. 3, lines 56-67, col. 4, lines 1-67, col. 10, lines 8-67 and col. 11, lines 32-61).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Lampert with the teachings of Papierniak so as to have a system for determining context because the combination would provide a system for making and using geographic database, a tree structure whose nodes represent geographic region information, including a plurality of data entities each of which represents a physical feature in geographic region (Lampert – col. 2, lines 42-67 and col. 3, lines 1-11) in the context-aware application computing and ubiquitous computing environment.

With respect to claims 29 and 32-36, Lampert discloses a system for determining context as discussed in claim 24.

Lampert does not explicitly indicate, "wherein the information comprises a universal resource locator (URL); wherein the organization-specific view has no context outside of the organization; wherein the computer-readable media is embodied on a mobile computing device; wherein the computer-readable media is embodied on a desktop device; wherein the computer-readable media is embodied a handheld mobile computing device; wherein the computer-readable media is accessible to a computing device via the Internet."

However, Papierniak discloses URL, wireless/mobile and Internet (col. 12, lines 61-67 and col. 13, lines 1-8; abstract, col. 1, lines 10-40, col. 3, lines 56-67, col. 4, lines 1-67, col. 10, lines 8-67 and col. 11, lines 32-61; col. 7, lines 55-67 and col. 8, lines 1-31).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Lampert with the teachings of Papierniak so as to have a system for determining context because the combination would provide a system for making and using geographic database, a tree structure whose nodes represent geographic region information, including a plurality of data entities each of which represents a physical feature in geographic region (Lampert – col. 2, lines 42-67 and col. 3, lines 1-11) in the context-aware application computing and ubiquitous computing environment.

With respect to claims 44-47, Lampert discloses a method for determining context as discussed in claim 37.

Lampert does not explicitly indicate, "wherein at least one of the nodes of the one or more second hierarchical tree structures has a good or a service associated with it, and wherein the traversing comprises locating a good or a service associated with a node and consuming the good or service; wherein the accessing of the first and the one or more second hierarchical tree structures comprises accessing tree structures that are locally available on a mobile 24 computing device; wherein the accessing of the first and the one or more second hierarchical tree structures comprises accessing at least one of the trees via a network medium; wherein the accessing of the first and the one or more second hierarchical tree structures comprises accessing at least one of the trees via the Internet."

However, Papierniak discloses business context, wireless/mobile and Internet (abstract, col. 1, lines 10-40, col. 3, lines 56-67, col. 4, lines 1-67, col. 10, lines 8-67 and col. 11, lines 32-61).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Lampert with the teachings of Papierniak so as to have a system for determining context because the combination would provide a system for making and using geographic database, a tree structure whose nodes represent geographic region information, including a plurality of data entities each of which represents a physical feature in geographic region (Lampert

– col. 2, lines 42-67 and col. 3, lines 1-11) in the context-aware application computing and ubiquitous computing environment.

With respect to claims 50-53, Lampert discloses a computer-readable media having computer readable instructions for determining context as discussed in claim 48.

Lampert does not explicitly indicate, “wherein the computing device automatically determines its location context; wherein the computing device is a handheld computing device; wherein the computing device is a mobile computing device; wherein the computing device is a desktop device; and wherein the computing device is a handheld computing device that automatically determines its location context.”

However, Papierniak discloses business context, wireless/mobile and Internet (abstract, col. 1, lines 10-40, col. 3, lines 56-67, col. 4, lines 1-67, col. 10, lines 8-67 and col. 11, lines 32-61).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Lampert with the teachings of Papierniak so as to have a system for determining context because the combination would provide a system for making and using geographic database, a tree structure whose nodes represent geographic region information, including a plurality of data entities each of which represents a physical feature in geographic region (Lampert – col. 2, lines 42-67 and col. 3, lines 1-11) in the context-aware application computing and ubiquitous computing environment.

With respect to claim 54, Lampert discloses defining a hierarchical tree structure comprising multiple nodes that each can define a physical or logical entity; associating

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one or more goods or services with one or more of the nodes; and traversing one or more of the multiple nodes (col. 2, lines 1-26, col. 8, lines 6-29 and col. 9, lines 35-48; abstract, col. 2, lines 42-67, col. 3, lines 1-10 and col. 26, lines 51-65).

Lampert does not explicitly indicate, "a good or service."

However, Papierniak discloses shopping for purchasing goods and services (abstract and col. 1, lines 10-31).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Lampert with the teachings of Papierniak so as to obtain a method of locating goods or services because the combination would provide a system for making and using geographic database, a tree structure whose nodes represent geographic region information, including a plurality of data entities each of which represents a physical feature in geographic region (Lampert – col. 2, lines 42-67 and col. 3, lines 1-11) in the context-aware application computing and ubiquitous computing environment.

With respect to claims 55-56, Lampert discloses linking one or more of the multiple nodes with another hierarchical tree structure that contains multiple nodes that each represent a geographical division of the Earth and traversing enables a current location to be determined (col. 2, lines 1-26, col. 8, lines 6-29 and col. 9, lines 35-48; abstract, col. 2, lines 42-67, col. 3, lines 1-10 and col. 26, lines 51-65).

With respect to claim 57, Lampert discloses define a hierarchical tree structure comprising multiple nodes that each can define a physical or logical entity; associate one or more goods or services with one or more of the nodes; and traverse one or more

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of the multiple nodes (col. 2, lines 1-26, col. 8, lines 6-29 and col. 9, lines 35-48; abstract, col. 2, lines 42-67, col. 3, lines 1-10 and col. 26, lines 51-65).

Lampert does not explicitly indicate, "a good or service."

However, Papierniak discloses shopping for purchasing goods and services (abstract and col. 1, lines 10-31).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Lampert with the teachings of Papierniak so as to obtain a method of locating goods or services because the combination would provide a system for making and using geographic database, a tree structure whose nodes represent geographic region information, including a plurality of data entities each of which represents a physical feature in geographic region (Lampert – col. 2, lines 42-67 and col. 3, lines 1-11) in the context-aware application computing and ubiquitous computing environment.

### **Contact Information**

6. Any inquiry concerning this communication should be directed to Anh Ly whose telephone number is (703) 306-4527. The examiner can be reached on Monday - Friday from 8:00 AM to 4:00 PM.

If attempts to reach the examiner are unsuccessful, see the examiner's



supervisor, Kim Vu, can be reached on (703) 305-4393.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 746-7238 (after Final Communication)

or:

(703) 746-7239 (for formal communications intended for entry)

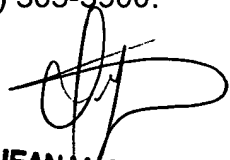
or:

(703) 746-7240 (for informal or draft communications, or Customer Service Center, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Fourth Floor (receptionist).

Inquiries of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

AL 

  
JEAN M. CORRIELUS  
PRIMARY EXAMINER

Jul. 10<sup>th</sup>, 2002.